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ABSTRACT

During the 1970-71 school year the Pontiac School District operated a vocational career development program to increase the occupational knowledge and self-concept of students. Evaluation of that first year pertained to context, input, process, and product. A description of the program, its results, and research procedures is included. Three major findings were: (1) Students showed significant gain in their level of occupational knowledge, (2) Upper elementary children showed greater gain in occupational knowledge than did lower elementary children, and (3) At the end of the program students selected occupations of higher rank than they did at the beginning of the program. (JS)

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Evaluation Report
Vocational Career
Development Program
1970-71

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EVALUATION REPORT

Project: Pontiac Vocational Career Development Program

Project Number 0-361-0122

Contract Number OEC-0-70-5183

VT 013 698

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July 1971

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FINAL EVALUATION REPORT

CONTEXT, INPUT, & PROCESS

June 1971

Project: Pontiac Vocational Career Development Program

Project Number 0-361-0122

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Submitted by: T. L. Ploughman

EVALUATION

Submitted by: Theo. Ploughman

Educational Services and Products, Inc.
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I. Evaluation Model

The CIPP Evaluation Model proposed by Daniel L. Stufflebeam and Egon Guba was selected as appropriate for this project. Stufflebeam identified four strategies of evaluation: Context, Input, Process, and Product evaluation, forming the CIPP Model. This model, as presented in Figure 1, identifies the Objectives, Methods, and Relations to Decision-Making in the change process under the four strategies. The multi-dimensional characteristics of the CIPP Model is presented further in terms of a logical structure in Figure 2.

The three evaluation strategies, Context, Input, and Process are considered to be dynamic over time of a project. That is, the project environment changes as the schools and community change, presenting a dynamic situational context for project staff and participants. Resources are added and subtracted, and the routines, activities, and objectives modified as performance provides feedback suggesting changes in procedures.

II. Context Evaluation

A. General

The characteristics of the Pontiac School District and participating elementary schools pertinent to this project are presented in the Project Proposal and in the later sections of this report.

The rationale for this project was well conceived as confirmed by participants following this first year's effort. needs were assessed

Figure 1

The CIPP Evaluation Model

A Classification Scheme of Strategies for Evaluating Educational Change

The Strategies

	Context Evaluation	Input Evaluation	Process Evaluation	Product Evaluation
OBJECTIVE	To define the operation context, to identify and assess needs in the context, and to identify and delineate problems underlying the needs.	To identify and assess system capabilities, available input strategies, and designs for implementing the strategies.	To identify or predict, in process, defects in the precedural design or its implementation, and to maintain a record of procedural events and activities.	To relate outcome information to objectives and to context, input, and process information.
METHOD	By describing individually and in relevant perspectives the major sub-systems of the context; by comparing actual and intended inputs and outputs of the subsystems; and by analyzing possible causes of discrepancies between actualities and intentions.	By describing and analyzing available human and material resources, solution strategies, and procedural designs for relevance, feasibility and economy in the course of action to be taken.	By monitoring the activity's potential procedural barriers and remaining alert to unanticipated ones.	By defining operationally and measuring criteria associated with the objectives, by comparing these measurements with predetermined standards or comparative bases, and by interpreting the outcome in terms of recorded input and process information.
RELATION TO DECISION-MAKING IN THE CHANGE PROCESS	For deciding upon the setting to be served, the goals associated with meeting needs and the objectives associated with solving problems, i.e., for planning needed changes.	For selecting sources of support, solution strategies, and procedural designs, i.e., for programming change activities.	For implementing and refining the program design and procedure, i.e., for effecting process control.	For deciding to continue, terminate, modify or refocus a change activity, and for linking the activity to other major phases of the change process, i.e., for evolving change activities.

Figure 2

Developing Evaluation Designs

The logical structure of evaluation design is the same for all types of evaluation, whether context, input, process or product evaluation. The parts, briefly, are as follows:

A. Focusing the Evaluation

1. Identify the major level(s) of decision-making to be served, e.g., local, state, or national.
2. For each level of decision-making, project the decision situations to be served and describe each one in terms of its locus, focus, timing, and composition of alternatives.
3. Define criteria for each decision situation by specifying variables for measurement and standards for use in the judgment of alternatives.
4. Define policies within which the evaluation must operate.

B. Collection of Information

1. Specify the source of the information to be collected.
2. Specify the instruments and methods for collecting the needed information.
3. Specify the sampling procedure to be employed.
4. Specify the conditions and schedule for information collection.

C. Organization of Information

1. Specify a format for the information which is to be collected.
2. Specify a means for coding, organizing, storing, and retrieving information.

D. Analysis of Information

1. Specify the analytical procedures to be employed.
2. Specify a means for performing the analysis.

E. Reporting of Information

1. Define the audiences for the evaluation reports.
2. Specify means for providing information to the audiences.
3. Specify the format for evaluation reports and/or reporting sessions.
4. Schedule the reporting of information.

F. Administration of the evaluation

1. Summarize the evaluation schedule.
2. Define staff and resource requirements and plans for meeting these requirements.
3. Specify means for meeting policy requirements for conduct of the evaluation.
4. Evaluate the potential of the evaluation design for providing information which is valid, reliable, credible, timely, and pervasive.
5. Specify and schedule means for periodic updating of the evaluation design.
6. Provide a budget for the total evaluation program.

Reference: Daniel L. Stufflebeam, "Toward a Science of Educational Evaluation". Educational Technology, July 30, 1968.

in the Project Proposal and given attention by project staff. However, a severe contextual factor did face the guidance consultants placed in the participating schools. The late confirmation of project support eliminated the pre-school in-service workshops planned to properly introduce both personnel involved and project programs to school staffs. Several principals were unaware of their involvement until school was ready to open in the Fall. For others, guidance consultants were not hired until well into the school year. The traumatic effect of this rush start was felt by the consultants via a hesitancy on the part of teachers to accept project activities as well as the conventional guidance function of the guidance consultants. The worth of the programs and the value of the guidance function in the schools overcame much of the resistance first felt by project staff.

B. Participating Schools

The occupational knowledge and the occupational self concept of students in the participating schools at the start of the project are discussed in the Product Evaluation section of this report.

Pontiac Schools attempts to actively involve representatives from their constituency in school projects. This project also attempted to recruit parents for a Citizen Advisory Group for each school. Success varied. A phenomenon became apparent in this school district. Parents from both ends of the socio-economic spectrum were willing to become involved with school activities. Those principals and consultants whose constituency fell in the middle between upper-middle class and econom-

ically deprived found it extremely difficult to involve the parents of their students. For a project geared so directly towards the personal and economic well-being of their children, it is unfortunate that such parent apathy exits. This situation is worth a more in-depth analysis to develop a scheme which will encourage parent involvement with school programs.

III. Input Evaluation

A. General

The resources required to focus on the goals and objectives of this project were detailed in the Project Proposal and discussed throughout this final report. The human resources include the guidance consultants, project director, school principals, advisory parents, instructional staff, central office staff, and those persons and business enterprises serving as representative vocational models. Such a broad spectrum of concerns, expertise, and functions clearly required systematic integration to create as effective an instructional program as feasible to reach project objectives. Again, the success of this input is discussed later in the Product Evaluation section.

The guidance consultants indicated that the schools are well supplied with equipments such as projectors to service classroom material presentations. No problems were expressed here. There was some difficulty locating satisfactory elementary vocational guidance material appropriate to the primary objectives of occupational knowledge and occupational self concept. The exemplary nature of this project anticipates such difficulty.

B. External Resources

External consultants were utilized for both staff and teacher in-service. Particularly effective were Dr. John Pietrofesa, Wayne State University, and Drs. Robert Williams and Joseph Mesana from Oakland Schools (the Intermediate School District serving Pontiac Schools). Although their on-site time is relatively small, external consultants tend to receive concentrated attention which influences performance beyond conventional in-service with familiear in-house resource persons. Obviously, choice of consultants is critical to this influence.

C. Strategies to Meet Goals

Several examples of project strategies and designs to fit these strategies are presented in the next section under Process Evaluation. One strategy emphasized here is the functional relationship between the Project Director and project Guidance Consultants. The Director encouraged each consultant to create their own guidance program within the framework of the broad conceptual base of the project. To facilitate this strategy, a minimal number of directives were issued and staff meetings generally limited to the sharing of experiences, with encouragement to "borrow" those ideas found successful. A risk is taken under this strategy. It is assumed that staff personnel are creative, self-motivated, and self-directed. The Project Director achieved a high measure of success with his approach. A factor influencing this success was felt to be the need to create first a local school acceptance for project programs prior to strong central office direction for particular activities.

IV. Process Evaluation

A. General

The CIPP Model describes the objective of Process Evaluation as: "To identify or predict, in process, defects in the procedural design or its implementation, and to maintain a record of procedural events and activities." This task might be accomplished by describing a PERT network composed of activities and events systematically integrated to accomplish the specific objectives of the project. Although such a routine would provide an excellent vehicle to evaluate Process, the combination of project complexity and evaluation effort limited the feasibility of such a procedure.

The external evaluator chose a combination of informal and formal evaluation procedures. The informal procedures consisted of discussions with staff personnel, encouraging them to consider their actions in a systematic manner. This effort should be expanded during the second year of the project. Appropriate topic areas include: accountability, management-by-objectives, cost/benefit analysis, information systems, and measurement and evaluation.

Several formal procedures were used during the project to record and permit analysis of factors such as: guidance consultant image of project director, consultant activity analysis, and principal and guidance consultant reaction to the project.

B. Systematic Tools

To encourage a systematic approach to decision-making the external evaluator designed the two forms presented in Figures 3. Information

and System Evaluation, and Figure 4. Alternative Procedural Designs. Although presenting two fundamental decision areas for the guidance consultant, these forms were not successfully introduced. The evaluator assumed an ease-of-use which was not realistic. Several consultants expressed a desire for an in-service session next year directed towards the use of such methods to assist them in their decision-making function.

C. Activity Analysis

1. Percentage of Time for Activities

The guidance consultants were asked during October 1970 and again in May 1971 to estimate the percentage of their time they devoted to a list of activities. The intent of this exercise was to identify first how their time was actually used, and secondly, the variations between consultants as a result of both individual school settings and consultant options. The two sets of time estimates are combined in Figure 5. The entries indicate that the guidance consultants tended to spend a greater proportion of their time Counseling on Student, Developing Classroom Materials, and engaging in Out-of-School Vocational Activities. A relatively small percentage of time was spent in Formal Evaluation, Working with Parent Groups, and Working with Teacher Groups. Comparing Project and Non-project percentage estimates indicates a slight concentration on Non-project activities,(influenced by one consultant's 30/70 split).

FIGURE 3 - INFORMATION SYSTEM AND EVALUATION

PLAN:	FOCUS: (Circle One) Project Director Guidance Consultants Elementary Teacher		Elementary Pupils Advisory Group_____	
	1	2	3	4
INFORMATION COLLECTION- What Source Schedule Format Collector				
INFORMATION ORGANIZATION- Medium Format Librarian				
INFORMATION ANALYSIS- Procedures What Information Analyst				
INFORMATION REPORTING- Schedule What Information Audience Procedure				
EVALUATION- Object of Evaluation Schedule Procedure Evaluator Analyst				

Signature

FIGURE 4 - ALTERNATIVE PROCEDURAL DESIGNS

Activity Description -

CHARACTERISTICS:	Design A	Go NoGo	Design B	Go NoGo	Design C	Go NoGo
DESIGN DESCRIPTION- Objectives						
Focus						
DESIGN PROCEDURES- Activities						
Relevance Benefits						
Limitations						
Feasibility						
Barriers Consequences						
Costs						
Implementation Schedule						
Evaluation Schedule						
Procedure						
DESIGN REQUIREMENTS- Resources Staff						
Material						
Facilities						
Time Available ( )						
Required by Design						
Budget Cost						

ACTIVITY	Dir	Avg	RESPONDENT 1	2	3	4	5	6	7	8	9
	PERCENT OF TIME DISTRIBUTION*										
Counseling one Student	30	28	20	40	50	30	10	17			
	20	19	20	15	25	15	20	-	20	25	12
Counseling a Group of Students	5	8	5	5	15	3	10	7			
	10	8	10	20	5	2	5	-	5	5	12
Work with one Teacher	10	10	10	8	3	8	10	10			
	5	9	15	5	10	10	10	-	8	5	6
Work with a Group of Teachers	2	3	5	-	1	3	1	5			
	1	5	5	-	5	3	5	-	5	8	12
Work with one Parent	5	7	3	2	5	1	30	-			
	4	7	10	-	10	5	10	-	5	8	6
Work with a Group of Parents	3	2	-	-	2	1	-	6			
	1	4	10	2	5	5	-	-	2	5	6
Develop Classroom Materials	15	13	10	20	10	25	4	10			
	20	19	10	20	18	20	15	-	20	21	30
Out-of-School Voc. Activities	10	8	20	15	1	1	5	6			
	25	15	10	20	15	25	15	-	15	10	12
Interact with Project Staff	12	12	10	10	10	20	5	15			
	4	6	5	8	5	5	10	-	10	7	1
Formal Evaluation of Activities	5	2	5	-	2	3	-	4			
	2	2	3	-	-	-	5	-	-	2	3
Miscellaneous - Desk Work	3	9	12	-	1	6	15	20			
	8	6	2	10	2	10	5	-	10	5	-
Total time per Respondent = 100%											
PROJECT vs NON_PROJECT											
Project Activites	45	51	60	50	45	35	60	55			
	45	45	30	55	40	45	45	-	45	55	-
Non-Project Activities	55	49	40	50	55	65	40	45			
	55	55	70	45	60	55	55	-	55	45	-
HOURS OVERTIME PER WEEK	13	7	12	8	10	4	6	5			
	10	7	12	3	20	5	10	-	7	1	-

* Table entries (A/B) are estimates for A-October 1970 and B-May 1971.
Dir. - Director, Avg. - Average Percentage for all Consultants

FIGURE 5. ACTIVITY ANALYSIS - PERCENT OF TIME DISTRIBUTION

2. Vocational Guidance Activities

The Elementary Guidance Consultants introduced the pupils in their schools to the "world of work" through activities such as: Field Trips, Assembly Programs, Role Models, Classroom Materials Used by the Teacher, and Classroom Activities Involving the Consultant. These activities were ranked for a number of attributes representing evaluative criteria. The attribute list and the average rank order of the five activities for each attribute are presented in Figure 6.

A compilation of ranks across all the attributes except Cost provided a rank order as follows:

Activity	Average Rank
A- Field Trip	2.4
C- Role Model	2.5
B- Assembly Program	2.8
D- Classroom Materials-Teacher	3.3
E- Classroom Activities-Consultant	3.4

Four attributes are of particular importance: Enthusiasm-of-Students, Choice-of-Counselor, Contribution-to-Objectives, and Best-for-my-School. Across these four attributes the activity rank-order list becomes:

Activity	Average Rank
A- Field Trip	2.2
C- Role Model	2.2
E- Classroom Activities-Consultant	3.2
B- Assembly Program	3.4
D- Classroom Materials-Teacher	4.5

The nine elementary schools participating in this project represent concentrations of representative classes of district constituency. A

FIGURE 6

ACTIVITY ANALYSIS

RANK ORDER THESE ACTIVITIES

A. Field Trip
B. Assembly Program
C. Role Model
D. Classroom Teacher Materials
E. Classroom Activities by Counselors

ATTRIBUTE	RANK ORDER OF ACTIVITES				
Planning Time:	D Least	B	E	A	C Most
Operation Time:	D Least	C	B	E	A Most
Enthusiasm of Students:	C Most	A	B	E	D Least
Cooperation of Teachers	A Most	C	B	E	D Least
Choice of Counselor:	C First	A	E and B		D Last
Enthusiasm of Parents:	A Most	C	B	E and D	
Reception by Resource Persons:	C Best	A	B		 Least
Contribution to Objectives:	A Best	C	E	B	D Least
Number of Pupils Involved to Date	A Most	B	C	E	D Least
Cost ($):	A Most	D	E	B	C Least
Best for my School:	C Best	A	E	B	D Least

Entries represent the Average Ranks for each Activity

Name_____

School_____

Date_____

FIGURE 6 - continued

Example: For each Attribute rank EACH activity!

ATTRIBUTE	RANK ORDER OF ACTIVITIES				
Ease of Use:	C	A	B	E	D
	Easy				Hard

Definition of Attributes-

Planning Time:	Average time required to prepare for one occurrance of the activity.
Operation Time:	Average time required to exercise the activity.
Enthusiasm of Students:	General reaction to the activity expressed by students prior to and following its occurrance.
Cooperation of Teachers:	General involvement by teachers during planning and exercise of the activity to promote success.
Choice of Counselor:	General reaction to the activity.
Enthusiasm of Parents:	General reaction of parents as expressed by involvement, voiced response to activity, and feedback through students.
Reception by Resource Persons:	General reaction by host persons to pupils, staff, and program.
Contribution to Objectives:	Relationship between program objectives and activity characteristics.
Number of Pupils Involved to Date:	Cumulative number of pupils exposed to activity to date.
Cost ($):	Average cost per occurrance of the activity.
Best for my School:	Comparison of activities considering characteristics of your school.

breakdown of individual consultant responses to the attribute "Contribution-to-Objectives" partitioned by school characteristics follows:

Activity: Contribution-to-Objectives

Schools	Activity Rank (First)				(Last)
Predominantly Black:					
Bethune	A	C	E	D	B
McConnell	A	C	E	B	D
Wilson	A	C	E	B	D
Integrated (17% to 45% Black):					
Central	B	D	A	C	E
Herrington	E	A	C	B	D
Twain	E	D	C	A	B
Economic and Educational Deprivation:					
Baldwin	A	C	E	B	D
Wisner	A	E	D	C	B
Middle Income, White:					
Whitfield	C	B	A	E	D

No clear response pattern is evident. The Field Trip, Use of Role of Models, and Classroom Activites by the Consultant tend to be ranked higher than the Assembly Program and Classroom Material use by Teachers.

D. Process Measures

Several Process Measures were identified by Stufflebeam: Interpersonal Relationships, Communication Channels, Logistics, Understanding of and Agreement with Intent of Program, Adequacy of Resources, Program Control, and Staff Evaluation. These measures were discussed with individual school Principals and the Elementary Guidance Consultants. Their responses are

summarized in this section. These discussions were held during the last month of the Project year. Thus the points of view expressed represent a capsule evaluative summary of the year's efforts.

1. Interpersonal Relationships

Guidance Consultants- A sincere concern was expressed by the consultants in this area. The role of a person new to a school staff involved with a program also new to that staff is difficult to establish. The consultants worked hard to gain acceptance for both themselves and the project programs they implemented. A fondness for "kids" was evident. A good warm relationship was obvious in the schools. Students eventually felt free to approach the consultant on their own with their personal problems.

Some of the teaching staff were perceived to be enthusiastic and a few hesitant, with a general breakdown following age or length of time in that school. To reach the staff, the consultants programmed their free time to coincide with teacher breaks in the lounge and also attempted to meet with teachers in the cafeteria for lunch. A point stressed was that the guidance consultant preferred to work with the teacher rather than over them.

Principals- The principals indicated that many classroom teachers were initially hesitant to use a person whose role is not clear to them. They felt that in-service is necessary for both the staff and the new guidance consultant. The situation of a White consultant in a predominantly Black school was a cause for initial concern. That concern has given way to admiration for a job well done. The consultants tended to approach the teachers and introduce their programs very slowly in the beginning of the project year. There is positive anticipation now.

2. Communication Channels

Guidance Consultants- The consultants indicated that they have the freedom to go direct to teachers without first stopping at the school office to clear with the principal. Similarly, teachers have direct access to the consultant.

Several of the consultants indicated that the principal has asked that they preview any new announcements of activities with his office prior to distribution. The reason for this request is not one of control but rather the need for the principal to kept aware of activities in the school should he become involved in some manner. The consultants were treated as regular staff members in that they were asked to attend staff meetings. This requirement was the only formal communication channel inthe schools.

Staff meetings with the Project Director served as an essential communication link between the consultants. Discussion of their activities in this forum provided a challenge to match other consultant successes, and effectively spread those practices found to be beneficial in meeting project objectives.

Principals- As indicated earlier, several principals indicated that they felt it necessary to require the consultants to clear special plans such as field trips, role models and assemblies with them to assure that he knew what was happening in the school or with the youngsters. One principal also remarked that his community was sensitive to school matters and he was concerned that mailings or communication with the parents be phrased such that no wrong interpretation would result. A similar request was voiced by a principal in the area of student referals. He felt it necessary that referrals go through him so that he would be aware of their existance and be able to respond to parents about

involvement of their child with the guidance consultant.

3. Logistics

Guidance Consultants- No severe logistical problems were indicated by the consultants. A slight difficulty was expressed in the distribution of materials. Two centers were established, one at the vocational center and one at one of the elementary schools. Consultants at the other schools were required to schedule the use of these items and arrange for delivery. Each consultant retained their own supply of materials they collected during the project.

Principals- No problems were identified in this area.

4. Understanding of and Agreement with Intent of Project

Guidance Consultants- The consultants used several means to inform their school's staff about the intent and programs of the project. The most common means was discussion in staff meetings with the teachers. A few of the consultants prepared special descriptive materials to promote their functions. This was generally a weak link in the implementation of the project. More effective use of informative in-service materials should have been used by the guidance consultants.

Several consultants called for Principal in-service prior to the start of the next school year. The Principals indicated that they would be receptive to in-service and further exposure of project goals and routines.

A teacher in-service program was instituted during the second term of the school year. A careful selection of teachers, three from each school (1st, 3rd, and 6th grades), permitted and resulted in a very successful program. These teachers then served as proponents of the project in their schools. An effective procedure!

The most persistent and difficult question was: "Why start so young". Responses centered around the theme of a K-12 systematic approach to occupational orientation.

The consultants themselves admitted that they were learning during the year the special significance that their role held for these elementary children. The existence of personal problems at such a young age was not anticipated by the younger consultants.

The younger teachers were perceived to be more interested. However, using the criteria of teacher initiated development of classroom materials, full agreement and involvement with the programs has not yet been achieved. Although generally supportive, the Principals were not perceived as strong proponents of the project. However, discussion with the Principals indicated quite a strong agreement with the project.

The students were perceived to be very receptive to the activities of the guidance consultants. A major decision faced by the consultant is the percentage of time that should be spent in essentially vocational related activities and time spent in basic guidance with individual students.

Principals- Those several Principals interviewed indicated that they felt they understood and generally agreed with the intent of the project. The elementary school serves almost a mother-father function for children in the lower socio-economic areas. A program that addresses the needs of these children is most welcome by the Principal and the parents. The Principals felt the the needs for guidance services should be identified by the individual schools, as they serve such a spread of community needs. One Principal expressed the existence of a great number

of students with personal problems because of poverty and a depressed home life. His criteria of program effectiveness were: "Look at kids, if attitude has changed, feel better about himself, positive minded towards school, able to resolve some of his personal problems - these are measures of success of guidance efforts."

5. Adequacy of Resources

Guidance Consultants- Generally the consultants felt they were provided adequate resources for their programs. One difficult area was the availability of adequate assembly facilities or time available for these facilities.

Principals- Again, the only concern was over assembly room.

6. Program Control

Guidance Consultants- The consultants were subject to both Project control by the Project Director, and building control by the Principal. Such a situation creates difficult relations. Both the Principal and the Project Director submit year end evaluations of the guidance consultant's performance.

The Project Director exercises little obvious control over the activities of the individual consultants in their schools. However, he exercises great influence over their performance via the regular staff meetings and open communication lines with his staff. He does indicate expectations, which the consultant then translates into programs for his or her school.

The consultants consider the Principal to be the boss of their school. When they are in the building, he controls them as he desires. However, both the Project Director and most of the Principals are very non-directive in their relations with the guidance consultants.

Principal- As one Principal stated: "He is responsible for what goes on in the building, even though he doesn't always control what comes into the building." The area of control is likely to be a problem more for the consultant than either the Principal or the Project Director.

7. Evaluation of Counselor

Guidance Consultant- Several consultants were evaluated via a teacher evaluation form which was admitted to be inappropriate by both the Principals and the Project Director .

A continuous evaluation scheme is most appropriate to provide that feedback necessary to improve performance while an opportunity exists. Most of the consultants felt that a complete evaluation would include the students, teachers, Principal, perhaps parents, and the Project Director.

Principals- Two Principals questioned the evaluation of the guidance consultants by teachers and/or students. A question was raised as to their understanding of the objectives for the consultant's programs which should form the basis for evaluation.

This area requires attention by the external evaluator during the next project year.

8. Summary

The external evaluator should concentrate attention on the following areas during the next project year: Parent Involvement, Integration into the Curriculum, Feedback from Students, Evaluation of Activities (Field Trips, Role Models, Assemblies), and Activity/Benefit Analysis Procedures.

Product Evaluation Report

Pontiac Career Guidance Program
An Examplary Program
in
Vocational Education

OEC - 070-5183
Project F 0-361-0122

Merle Smith Ph.D.
Evaluation Office
Community Action Programs

Product Evaluation

Pontiac Career Guidance Program

This section of the evaluation report deals with the output of the career guidance program. Its purpose is to assess whether or not the program produced changes on the part of students in terms of their awareness of knowledge of occupations and improvement of occupational self-concept.

Description of the Program

A complete description of the program is given in the process section of the evaluation report. Briefly, the program consisted of the placement of nine elementary school counselors. Career guidance activities were instituted. The activities were assumed to lead to the accomplishment of the two major objectives of the program. The first objective was to increase the occupational knowledge of the students. The second objective was to improve the occupational self-concept of the students.

Occupational knowledge as used in the program and in this study refers to the students' ability to list occupations Occupations were defined as income producing jobs capable of being c sified into the major occupational fields. This is a very limited measure of occupational "knowledge" but such a definition made measurement among elementary school children possible. There was no attempt made to ascertain degree of knowledge. The ability to list an occupation was taken as an index of some knowledge about the given occupation.

The definition of vocational self-concept is more difficult to define in operational terms. Starishensky and Matlin (1963) in their discussion of a model for vocational self concept speak of occtalk and

psychtalk. Occtalk consists of statements made by individuals in reference to membership in an occupational class. The authors contend that statements in occtalk can be translated into psychtalk. Psychtalk consists of self referent statements usually having value dimensions. Super (1963) defines vocational self concept in terms of ones' self as a member of an occupation. This latter definition was the one chosen for the program and study since it lends itself to measurement possibilities, to a greater extent than does the definition of Starishensky and Matlin. Occupational self concept thus as used in this study refers to the individuals' perception of himself within a given occupation. This to is a limited definition but was deemed suitable for a first year program and study. Considering the above definitions the statements of the program objectives might be stated in behavioral terms in the following manner.

Objective Number 1

The student will demonstrate an increase in occupational knowledge as indicated by a comparison of lists written by the students at the beginning of the program and lists written at the end of the program. The objective will be attained if the post test mean is significantly greater than the pre test means. (Significance at .05 level)

Objective Number 2

The students will demonstrate improvement of occupational self concept by selecting from a given list of ranked occupations, those occupations ranked high. This objective will be considered reached if the post test rankings are significantly higher than the pre test rankings.

Research Procedures

Measures:

The measures used in this study were developed by the internal evaluator and the career guidance program staff. All the measures used in the study are included in the appendix.

In addition to measures used to assess output in terms of the program objectives, other measures were used to obtain information related to career guidance. Presently there are few measures available for elementary school children and the program afforded the opportunity to obtain data which can be used for planning future programs as well as serving as baseline data for any future research.

The first measure to be discussed is the Occupational Knowledge Test, (OKT). To measure students' knowledge of occupations, counselors asked students to list all the occupations they could think of at the moment. These lists were then scored by the Office of Evaluation. A student was given one point for each listed occupation which fitted the definition of an income producing job belonging to a major occupational field.

Because of limited resources, no attempt was made to establish reliability or validity of the O.K.T. There was concensus of scoring but no statistical analyses were made. The limitations of the above measures are obvious but there was general agreement that such a measure does provide some indication of occupational knowledge of elementary school children.

The second measure used in the study consisted of asking the students to select an occupation that they thought they really would attain upon

reaching adulthood. The students selected occupations with rankings roughly similar to the North-Hatt rankings. The questions were imbedded in a 12 item scale modeled after the Career Guidance Survey developed by Leonard. (1968) Four of the items related directly to the students' perception of their occupational role. Four of the items attempted to measure the students occupational choice on the fantasy level. Students were also asked to select ranked occupations that they thought they had the ability to fulfill. To some extent, this latter measure could be considered a measure of aspiration. The total test thus consists of three subtests - fantasy - ability - reality, (FAR). There was also no attempt made to establish reliability or validity of this measure. Leonard does not provide statistical data. The scale had been used in a previous study by the author and found suitable for use with upper elementary students in term of item comprehension. The counselors upon giving the FAR, however, found that some of the items were difficult for some students. The scale was also criticized on the grounds that some of the rankings were not appropriate, the list of occupations were too short, and that there were too few occupations relevant to female students.

A measure used to obtain baseline data was the attitude scale of the Crites Vocational Development Inventory (VDI) constructed at the University of Iowa (Crites, 1969). This measure has a reported internal consistency coefficient of .74. The author reports that the attitude scale has acceptable content validity as indicated by Judges' agreements with the scoring key. The VDI was also used by one of the counselors in her masters thesis which compared scores obtained in a low income school and those obtained by students in a middle income school. (Phillips, 1970).

The Piers Harris Self Concept Scale was used by another counselor to test the effect of group counseling procedures on the self concept of problem students. (Weiss, 1970) The Piers-Harris Scale has been used extensively in self concept research within the Pontiac School District. It has a test-retest reliability of .72.

Data Collection Procedures

Of the nine elementary school counselors, six counselors administered the Occupational Knowledge Test (O.K.T.) and the F.A.R scale to all fourth, fifth, and sixth graders in their building. The tests were given in October of 1970 and in May of 1971. The tests were given in a group setting with the counselors reading the test directions and items along with the students. This was done to overcome any distortion of test scores due to reading level difficulty.

In one school only the fifth and sixth graders were given the F.A.R. scale and one school did not do any testing because of demands placed upon students due to their being tested at length throughout the school year for purpose of instituting an individualized instructional program during the 1971-72 school year. Incomplete data on some tests were obtained from another school due to the late employment of the counselor.

Only the O.K.T. was given to lower elementary students in the six schools where complete data are available. Counselors were asked to randomly select ten students from each lower elementary grade. Kindergarden students dictated their occupational lists to the counselors. The total number of children tested is given in the appropriate table in the result section of this evaluation.

The Piers Harris Self Concept Test was given on a pre-post basis in the

study conducted by Weiss. The VDI was given to only sixth graders in February of 1970. The study done by Phillips also employed the VDI administered to fifth and sixth graders in two schools. The Weiss study and Phillips study are attached to the final report by the project director and will not be discussed in the result section of this report.

Data Analyses

Descriptive statistics include means and standard deviations on all pre-post test variables. The significance of pre and post test mean differences was assessed through employment of the t test for correlated samples. Raw scores were punched on IBM cards and the data were analyzed through use of the 360 IBM computer at Oakland Intermediate School District and the data analysis system available within the Pontiac School District. Dr. Rodney Roth and Dr. Loyal Joos of the Oakland Intermediate School District provided the author with considerable assistance as did Mr. Mel Staebler and Mr. Sam Counts of the data processing department of the Pontiac Public Schools.

Results

Table I below presents the occupational knowledge pre test means and standard deviations by grade level and schools.

Table I

Pre-Test Means, Standard Deviations O.K.T.

School and Grade Level		N	Mean	Standard Deviation
Bethune	4th	34	7.88	4.19
	5th	21	12.19	5.08
	6th	36	20.94	10.83

Table 1 continued

School and Grade Level		N	Mean	Standard Deviation
Wisner	4th	36	6.30	4.25
	5th	32	7.78	5.03
	6th	33	8.51	3.14
Baldwin	4th	39	6.46	4.48
	5th	39	6.46	3.95
	6th	29	21.93	11.04
Whitfield	4th	57	8.84	6.20
	5th	52	12.02	6.71
	6th	40	18.05	8.32
Herrington	4th	47	4.77	4.69
	5th	46	7.26	5.82
	6th	43	8.16	5.37
Twain	4th	53	7.09	5.82
	5th	27	7.29	6.05
	6th	46	11.65	6.92
Total Group		710	9.92	7.81

Inspection of Table I indicates that there is a persistent trend for the number of occupational listings to increase with grade level. This finding lends some credibility to the instruement in as much, logically, one would expect the means to increase with age.

Table II gives the post test means for the O.K.T. on the 4th, 5th, and 6th grade levels.

Table II

Post Test (O.K.T.) Means and Standard Deviations

School and Grade Level		N	Mean	Standard Deviation
Bethune	4th	34	12.58	9.87
	5th	21	22.86	12.12
	6th	36	39.53	13.33
Wisner	4th	36	23.11	8.70
	5th	32	37.41	11.53
	6th	33	33.33	15.38

Table II continued

School and Grade Level		N	Mean	Standard Deviation
Baldwin	4th	39	15.94	7.53
	5th	39	13.00	6.32
	6th	29	18.41	7.54
Whitfield	4th	57	23.59	10.46
	5th	52	26.33	12.45
	6th	40	33.15	15.64
Herrington	4th	47	16.70	9.19
	5th	46	16.93	8.72
	6th	43	18.60	9.91
Twain	4th	53	13.64	11.62
	5th	27	21.74	15.71
	6th	46	17.39	12.13
Total Group		710	22.02	13.63

The results reported in Table II show a trend similar to that in Table 1. That is, occupational knowledge increases with age although the trend is not as marked with post test data as with the pre test data. The fact that there are some reversals to this trend suggests that the relationship between age and occupational knowledge is not necessarily a linear one of a high magnitude of correlation.

Table III reports the t test findings when pre and post test means were compared. The t test here is the one reported by Garrett for use with correlated samples, (Garett, 1958).

Table III

t test O.K.T. 4th, 5th, and 6th graders

School and Grade Level	Pre Test Mean	Post Test Mean	Mean Difference	DF	t
Bethune					
4th	7.88	12.58	4.70	33	2.98**
5th	12.19	22.86	10.67	20	4.24**
6th	20.94	39.53	18.58	35	7.12**

Table III continued

School and Grade Level	Pre Test Mean	Post Test Mean	Mean Difference	DF	t
Wisner					
4th	6.30	23.11	16.80	35	14.57**
5th	7.78	37.41	29.62	31	16.87**
6th	8.51	33.33	24.81	32	9.61**
Baldwin					
4th	6.46	15.74	9.48	38	9.31**
5th	6.46	13.00	6.54	38	7.48**
6th	21.93	10.41	3.52	28	1.87
Whitfield					
4th	8.84	23.59	14.75	56	13.09**
5th	12.02	26.33	14.30	51	9.11**
6th	18.05	33.95	15.90	39	6.28**
Herrington					
4th	4.77	16.70	11.93	46	12.05**
5th	7.26	16.93	9.63	45	9.97**
6th	8.16	18.60	10.50	42	8.52**
Twain					
4th	4.09	13.64	6.55	52	5.15**
5th	7.29	21.74	14.45	26	6.34**
6th	11.65	17.39	5.73	45	3.49**
Total Group	9.92	22.02	12.10	709	26.80**

** significance at .01 level

As can be seen from Table III all the t tests except one are significant beyond the .01 level of confidence. It is quite clear that the post test means are significantly higher than the pre test means. One could theoretically assume then that the program met its first objective of increasing occupational knowledge among the students in the 4th, 5th, and 6th grades. These findings, however, must be interpreted in a cautious manner. There appears to be a positive relationship between age and level of occupational knowledge. The significant t tests could reflect this but it is impossible to explore this relationship in the absence of a control group. Any future research using the O.K.T. should make provision for this possibility. The fact that practically all schools showed significant increases at practically all grade levels is

supportive evidence, however, that the activities carried out in the program had significant impact on the students. Moreover the fact that the fourth grade post test means are considerably above the fifth grade pre test means indicates that the difference in pre-post test means for a given grade level is not due to maturational factors above but rather are greatly influenced by the activities within the program. On the basis of maturation alone, one would expect the post test means of one grade to be quite similar to the pre test means of the next higher grade level.

The next set of results concern the growth of occupational knowledge among the lower elementary school children. Table IV presents the pre and post test means and standard deviations for the O.K.T. given to the lower elementary school children.

Table IV

Pre-Post Test Means, Standard Deviations O.K.T.
Lower Elementary Level.

School and Grade Level	N	Pre Test Mean	SD	Post Test Mean	SD	t
Bethune						
Kg.	10	2.80	1.25	5.80	3.31	2.52
1st	10	6.00	2.44	7.60	4.58	0.91
2nd	10	7.30	1.80	12.90	4.79	3.21
3rd	10	9.20	1.25	22.0	9.36	4.03
Baldwin						
Kg.	8	.620	.630	4.00	1.72	4.92
1st	10	3.30	1.21	7.50	3.16	3.72
2nd	10	3.00	1.51	7.30	2.83	4.03
3rd	8	7.50	3.87	14.87	4.31	3.49
Herrington						
Kg.	7	1.14	.346	10.66	4.69	4.90
1st	10	1.60	1.00	15.20	6.25	6.44
2nd	10	1.70	1.21	16.70	4.24	10.06
3rd	10	3.10	2.23	10.12	7.55	2.62
Whitfield						
Kg.	10	1.10	1.13	1.91	1.24	1.34
1st	10	2.30	1.01	2.20	1.22	.163
2nd	10	2.40	.290	8.60	9.23	2.00
3rd	10	3.10	2.03	10.50	5.83	3.53
Wisner						
Kg.	10	.60	.220	5.10	5.10	2.61
1st	10	2.9	1.810	9.50	6.85	2.77
2nd	10	2.70	1.10	15.60	8.00	4.74
3rd	10	2.60	1.22	24.30	20.50	3.15
Total	193	3.60	5.67	11.266	11.62	8.90

ns - non significant
* - significant at .05 level
** - significant at .01 level

For 9 degrees of freedom the required t at the .05 level equals 2.26, at .01 level t equals 3.25 (t test here is for independent samples).

The above table illustrates that the program obtained the objective of increasing occupational knowledge among the lower elementary school children. The gains are not nearly as large as those demonstrated by the upper elementary group, but still the majority of t test are significant at .05 and .01 levels. The comparison of gains among upper and lower elementary students suggest a differential effect of the program. Again the research design does not allow testing of an alternate explanation of gains being the result of maturational factors.

The next set of results pertain to the objective of improvement of occupational self concept defined here in terms of reality of choice.

The findings obtained from the F.A.R. scale will now be presented and discussed. Table V below gives the pre test means and standard deviations for the three subtests, Fantasy, Ability, and Reality.

Table V

Pre Test Means, Standard Deviations F.A.R. Scale

School and Grade Level	N	Fantasy $\bar{X}$	Fantasy SD	Ability $\bar{X}$	Ability SD	Reality $\bar{X}$	Reality SD
Bethune							
4th	34	10.735	2.38	10.58	2.91	9.29	2.21
5th	21	9.24	2.05	8.81	1.63	9.19	3.08
6th	36	11.97	2.63	10.50	2.94	10.08	2.91
Wisner							
4th	36	10.86	2.53	9.91	2.46	8.81	2.50
5th	32	11.50	2.08	9.69	2.48	9.84	2.99
6th	33	11.51	2.33	10.45	2.34	9.81	2.67
Baldwin							
4th	39	11.28	2.58	11.53	2.65	9.84	2.45
5th	39	11.76	3.17	10.43	2.85	9.97	3.00
6th	29	11.13	2.97	11.13	2.29	10.34	2.27

Table V continued

School and Grade Level	N	Fantasy $\bar{X}$	Fantasy SD	Ability $\bar{X}$	Ability SD	Reality $\bar{X}$	Reality SD
Whitfield							
4th	57	12.10	2.36	11.26	2.24	9.93	2.65
5th	52	11.84	2.55	10.98	2.47	10.21	2.40
6th	40	12.47	2.34	10.75	2.74	10.97	2.73
Herrington							
4th	47	11.23	2.78	9.81	2.69	9.25	2.38
5th	46	11.61	3.02	10.56	3.08	10.34	2.87
6th	43	11.51	2.21	10.39	2.48	19.72	2.68
Twain							
4th	53	11.37	2.42	10.68	2.60	10.35	2.67
5th	27	11.59	2.88	11.29	2.59	10.55	3.09
6th	46	12.45	2.51	11.21	2.69	10.87	3.16
Total	710	11.55	2.60	10.618	2.64	10.00	2.73

Examination of the pre test data demonstrates a trend for the fantasy score to be higher than either the ability perception or reality perception. Each subtest has a total of sixteen points and the majority of fantasy mean scores are high. Noteworthy here is the restricted range of responses indicated by the small standard deviations. Evidently the scale items restrict student choice. This, in some respects, would be predictable from the views of Ginsberg who points out the role of fantasy in occupational choice development, (Ginsberg, 1966). There is a gradual decrease in scores from fantasy choice to ability to reality choice. A possible desired output of the career guidance program would be a decrease in fantasy choice and an increase of ability or aspiration and a subsequent increase in the reality choice. Vocational choice development theory, however, does not necessarily advocate modifications in the usual developmental sequence. It does adovcate that students have full knowledge of career possibilities and that this knowledge coupled with awareness of self interests and abilities would lead to realistic career choices during the junior-senior high

years. The only output or product here is the reality choice: the objective does not address itself to the problem of what constitutes a realistic choice in the light of abilities and interests. In a real sense reality choice in this study could be identical with occupational aspiration.

Table VI

Post Test Means, Standard Deviations F.A.R. Scale

School and Grade Level	N	Fantasy $\bar{X}$	Fantasy SD	Ability $\bar{X}$	Ability SD	Reality $\bar{X}$	Reality SD
Bethune							
4th	34	10.97	2.49	10.32	2.92	11.58	14.07
5th	21	10.38	2.69	9.85	1.90	9.66	2.51
6th	36	12.08	2.68	10.63	2.68	11.33	2.49
Wisner							
4th	36	11.19	2.60	9.77	2.34	10.13	2.60
5th	32	12.34	2.31	9.34	2.63	10.84	3.65
6th	33	11.42	2.29	9.91	2.72	9.84	2.53
Baldwin							
4th	39	11.84	2.12	11.20	2.20	11.07	3.04
5th	39	11.87	2.34	10.25	2.39	10.46	2.54
6th	29	11.82	2.31	10.86	1.95	10.44	2.69
Whitfield							
4th	57	12.24	2.24	10.59	2.61	9.84	3.22
5th	52	11.40	2.96	10.17	3.04	9.76	3.01
6th	40	11.12	2.45	10.50	3.38	11.45	3.37
Herrington							
4th	47	11.19	2.69	9.36	2.49	10.23	2.49
5th	46	11.80	2.21	10.11	2.38	10.56	2.75
6th	43	12.23	2.05	10.04	2.21	11.04	2.59
Twain							
4th	53	11.71	2.29	11.39	3.02	10.45	3.46
5th	27	12.77	1.80	11.44	2.70	11.63	3.02
6th	46	12.71	2.37	10.46	2.71	11.06	2.93
Total	710	11.81	2.43	10.37	2.67	10.60	4.19

Visual inspection of Table VI shows the same trend as the pre test data in that fantasy scores continue to be higher than ability or reality mean scores. The standard deviations, however, are slightly larger indicating a wider range of choices on the part of students. The t test for correlated samples was used to test pre-post test differences and resultant t tests are given in Table VII.

Table VII

t Test F.A.R. Scale

School and Grade Level	N	Fantasy $\bar{X}$ Gain	t	Ability $\bar{X}$ Gain	t	Reality $\bar{X}$ Gain	t
Bethune							
4th	34	.235	.47 ns	.265	.40 ns	2.29	.97 ns
5th	21	1.14	1.66 ns	1.04	1.90 ns	.476	.81 ns
6th	36	.111	.25 ns	.139	.25 ns	1.25	2.81 *
Wisner							
4th	36	.33	.71 ns	.139	.38 ns	1.33	2.49 *
5th	32	.844	2.08 *	.34	.70 ns	1.00	1.63 ns
6th	33	.09	.27 ns	.54	1.09 ns	.03	.06 ns
Baldwin							
4th	39	.56	1.21 ns	.33	.68 ns	1.23	2.29 *
5th	39	.103	.23 ns	.179	.34 ns	.487	1.01 ns
6th	29	.690	1.63 ns	.276	.72 ns	.103	.26 ns
Whitfield							
4th	57	.14	.45 ns	.66	1.57 ns	.088	.21 ns
5th	52	.44	1.04 ns	.808	1.96 ns	.442	.91 ns
6th	40	1.35	2.60 *	.250	.49 ns	.475	.89 ns
Herrington							
4th	47	.68	1.60 ns	.447	1.18 ns	.979	2.96 **
5th	43	.196	.37 ns	.457	.88 ns	.217	.46 ns
6th	53	.721	1.92 ns	.349	.76 ns	1.32	2.99 **
Twain							
4th	53	.34	.88 ns	.717	1.63 ns	.094	.22 ns
5th	27	1.18	2.86 **	.148	.33 ns	1.07	2.34 *
6th	46	.26	.66 ns	.45	.92 ns	.19	.45 ns
Total	710	.258	2.47 *	.239	2.13 *	.607	3.87 **

ns - non significant
* - significant .05 level
** - significant .01 level

Inspection of table VII in regards to the fantasy score shows that out of eighteen possibilities (18 groups) there were only three instances in which the mean gains could be considered statistically significant. There were no significant differences on the ability subtest. Within six groups, there were significant differences when pre-post means on the reality subtest were compared. This trend for larger gains to be evidenced on the reality subtest supports the idea that the program reached its objective of improving occupational self concept. Further support is provided when the t's based on the total population are examined. Here the t test on mean gains on the reality subtest is significant at the .01 level. It must be borne in mind, however, that with this size sample (n=710) only a small gain is needed to bring forth statistical significance.

Examination of gains shows that while some gains did reach the level of statistical significance, the size of the gains are such that they are deemed to have little educational significance.

The fifth and sixth graders at Central Elementary School were also given the F.A.R. scale. Since none of the t tests on the three variables for either fifth or sixth graders reached statistical significance, the data will not be presented in this report.

In summary it can be stated that in terms of increasing occupational knowledge, the career guidance program reached its objective. The gains were statistically significant and are of sufficient magnitude to imply educational significance.

There was a strong trend for students to select high ranked occupations upon post testing. Occupational self concept thus also showed improve-

ment. The t test on the total group was statistically significant but the gain was such that it is questionable if much educational significance can be attached to the finding.

The data does provide substantial basis for exploring the relationships between the fantasy stage, capacity stage, and period of realistic choices. Our data suggest that there is little difference between fourth, fifth, and sixth graders. In terms of the vocational decision theory model proposed by Ginsberg, the students are within the fantasy stage and sixth graders show a slightly higher appraisal of their abilities. They also tend to select the higher ranked occupations than do fourth and fifth graders. It would be of interest to continue this type of study to the junior-senior high levels to ascertain the changes that occur over time. Such research could have a bearing for career development program planning at different school levels.

The program made it possible to collect data on the vocational maturity of the students. For this purpose the Vocational Development Inventory, (VDI) attitude scale was administered to sixth graders in five schools. The VDI consists of fifty declarative statements. The student is asked to indicate agreement or disagreement with the statement. Crites points out that the relationship between mean scores and age is a positive one in that scores increase as age increases. Crites also cites studies to indicate that disadvantaged children tend to obtain lower scores than white suburban students. (Crites, 1969).

The means and standard deviations of the VDI are given in table VIII

Table VIII

Means, Standard Deviations 6th Graders - VDI

School	N	$\bar{X}$	SD
Baldwin	25	27.64	4.47
Bethune	25	26.64	5.18
Twain	25	27.60	3.02
Whitfield	26	28.96	5.74
Wilson	25	26.08	5.55

The highest mean score was obtained at a school which could be classified as white, middle class suburban but there appears to be little difference between the five means. The lowest mean scores were obtained in schools located in the lower socio-economic sections of the city.

The VDI findings can serve as baseline data and can be used in future evaluation work with career guidance programs.

Summary of Results

Major Findings

1. Students showed significant gain in their level of occupational knowledge. It was suggested that this gain was due to the activities of the career guidance program. An alternate explanation to be investigated in future research is that the observed increase may be due to maturational factors.
2. Upper elementary children showed greater gain in occupational knowledge than did lower elementary children. This finding implies that the program had a greater impact on the upper elementary children.
3. At the end of the program students selected occupations of higher ranking than they did at the beginning of the

program. This finding implies an increase of occupational self concept as defined in this study. While the gain was statistically significant, the quantitative gains were of small magnitude hence little educational significance can be attached to the findings.

Secondary Findings

1. There was a tendency for fantasy choice scores to decrease and for reality choices to increase. Because of the size of the changes, however, little interpretative significance is attached.
2. Reality choices tend to increase with age. This is in keeping with vocational choice theory.
3. There was little difference between the schools when sixth graders were examined relative to their attitudes toward work. Higher mean scores were obtained by schools having middle class status.
4. Future research should continue with instrument development, examination of vocational choice theory, and program development.

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APPENDIX

OCCUPATIONAL CHOICE INVENTORY

Post Test

Name _____

Grade _____

School _____

Pretend you can be anything you want to be, choose the answer which says what you would like to be.

1. If you could be anything you wanted, which one below would you be.

   A. Chemist
   B. Accountant
   C. Mail Carrier
   D. Taxi Driver

2. I would also like to be a.

   A. Welder
   B. Policeman (Policewoman)
   C. Computer Operator
   D. Janitor - Cleaning Woman

Now tell us what you think you can do.

3. I have the ability to become.

   A. Recreation Director
   B. Assembly line Worker
   C. College Professor
   D. Dishwasher

4. I have the ability to..

   A. Work in a bank
   B. Work in a restaurant being a waiter, or waitress
   C. Work in a factory welding
   D. Become a teacher

Now choose the job you think you will really get when you grow up.

5. Which of the following do you think you are really going to do when you become an adult.

   A. Be a lawyer
   B. Work in a factory
   C. Be a drugstore clerk
   D. Be a waiter/waitress

6. When I grow up I am really going to.

A. Be a cook in a restaurant
B. Teach at a university
C. Be a doctor
D. Fix peoples' hair

Again pretend you can be anything you want to be, what would you choose.

7. If I could be anything I wanted to be, I would be.

A. Musician
B. Bookeeper
C. Scientist
D. Clothes presser in a laundry

8. I would also like to be.

A. Carpenter
B. Sales clerk
C. Mechanic
D. Story writer (Author)

What jobs do you have the ability to do.

9. I have the ability to be.

A. An appliance repair person
B. A television performer
C. A dentist
D. An orderly in the hospital

10. I have the ability to be.

A. Social worker
B. Store clerk
C. Actor/Actress
D. A typist

Again we are asking you what you think you will really do when you grow up.

11. I am really going to be a.

A. An insurance salesman
B. President of a company
C. A judge in a court
D. School principal

12. I am really going to be.

A. A librarian
B. A pharmacist
C. Bus driver
D. A watch repair person

F ____

A ____

R ____